

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 27042	FOR FURTHER ACTION <div style="font-size: small; text-align: right;">see Form PCT/ISA/220 as well as, where applicable, item 5 below.</div>	
International application No. PCT/IL04/00091	International filing date (<i>day/month/year</i>) 29 January 2004 (29.01.2004)	(Earliest) Priority Date (<i>day/month/year</i>) 29 January 2003 (29.01.2003)
Applicant YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐

With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box No. II)

3. ☐ Unity of invention is lacking (See Box No. III)

4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 3B



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.

Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

NEW ABSTRACT

A laser power grid for operation with data networks employs WDM and incorporates wavelength addressing. The laser power grid (100) includes a laser power supply station (110) comprising a plurality of continuous-wave laser sources (112, 114, 115, 116, 118), a laser distribution grid (130) for distributing light propagations of different wavelengths throughout a data network and an optical switching network (142, 144, 145, 146, 148) coupled to the laser distribution grid for locally turning the laser power on when it is needed. The laser power grid replaces systems of tunable lasers. It is considerably faster and cheaper than systems of tunable lasers and produces less waste heat within the data network surroundings. The laser power grid incorporates parallel fast optical communication in complex multi-node communication and computer networks and enables the implementation of burst switching and packet switching by wavelength addressing.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00091

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 10/04, 10/12

US CL : 398/200,201

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 398/200,201

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,999,291 A (ANDERSON) 07 December 1999 (07.12.1999), FIG. 1.	1-12,43
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A		13-39,42
Y	US 2002/0085594 A1 (PEZESHKI et al) 04 July 2002 (04.07.2002), FIG. 2.	1-12,43
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A		13-39,42
Y	WO 00/02098 A1 (AGRANAT et al) 13 January 2000 (13.01.2000), FIG. 1.	5-6
Y	US 2002/0159688 A1 (KIM et al) 31 October 2002 (31.10.2002), FIG. 10.	8-9,43
Y	US 6,501,866 B2 (THOMAS) 31 December 2002 (31.12.2002), FIG. 6.	12
Y	US 6,141,126 A (LAHAT et al) 31 October 2000 (31.10.2000), FIG. 1.	40-41
Y	US 6,411,418 B1 (DERI et al) 25 June 2002 (25.06.2002), FIG. 2.	40-41

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

18 November 2004 (18.11.2004)

Date of mailing of the international search report

17 DEC 2004

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